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Appeal Brief

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**IN THE UNITED STATE PATENT AND TRADEMARK OFFICE**
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

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| In re application of: | STAHL, Thomas Anthony, et al. |
| For: | METHOD AND APPARATUS FOR MAPPING PRIORITIZED QOS PACKETS TO PARAMETERIZED QOS CHANNELS AND VICE VERSA |
| Serial No. | 10/561,141 |
| Filed | December 19, 2005 |
| Art Unit | 2465 |
| Examiner | WYLLIE, Christopher T. |
| Attorney Docket No. | PU030179 |
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## APPEAL BRIEF

*ON APPEAL FROM GROUP ART UNIT 2465*

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Sir:

This Appeal Brief is submitted both in support of the Notice of Appeal filed July 23, 2010 and in response to the Final Office Action dated April 1, 2010 accompanied by the attached Petition for Extension of Time. Please charge the fee of $540 for the Appeal Brief and $130 for the Petition for Extension, and any other fees associated to charge account 07-0832.

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## I. REAL PARTY IN INTEREST

The real party in interest is Thomson Licensing, the assignee of record, whose assignment is recorded in the USPTO as of December 19, 2005 on three (3) pages beginning at Reel 017396, Frame 0400.

## II. RELATED APPEALS AND INTERFERENCES

Appellant is not aware of any pending appeals, judicial proceedings, or interferences which may be related to, directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

## III. STATUS OF CLAIMS

The status of the claims in the present application is provided immediately below as follows:

a) Claims 1-22 are pending in this application, stand rejected in a Final Office Action dated April 1, 2010, and are the subject of this appeal.

b) Claims 1, 5, 12 and 22 are independent claims.

## IV. STATUS OF AMENDMENTS

The claims listed in Section VIII, Claims Appendix, of this Appeal Brief correspond to the claims as submitted in Appellants' captioned "*Amendment and Response under 37 C.F.R. § 1.111*" filed December 23, 2009. All amendments filed in this application have been entered and there are none pending.

## V. SUMMARY OF CLAIMED SUBJECT MATTER

It should be explicitly noted that it is not the Appellant's intention that the currently claimed or described embodiments be limited solely to operation within the illustrative embodiments identified below. Furthermore, citations to exemplary descriptions of illustrative embodiments are provided below in association with portions of the claims, which are related to the identified illustrative embodiments, entirely for compliance with, and in satisfaction of, the requirements for filing this appeal. There is no intention to read

any further interpreted limitations into the claims as presented. Moreover, it will be appreciated that additional exemplary descriptions, though not cited herein, may be present in this patent application.

The claimed invention, as recited in claim 1, is directed to a method for transferring packet-based digital data between a first communications network and a second communications network (Fig. 1), said method comprising: receiving a stream of packet based digital data from the first communications network, the first communications network having a prioritized communications protocol (Fig. 1; page 8, line 30 to page 9, line 21; Fig. 2, 220); determining a priority code associated with a data packet of said stream (Page 9, lines 22-34; page 10, line 24 to page 11, line 20); determining whether to open a channel comprising an isochronous channel or an asynchronous channel in response to the priority code (Page 9, lines 22-34; page 10, line 24 to page 11, line 20); using the presence of the priority code as an indication for setting up the channel for communicating information in said stream of packet based digital data to a second communications network (Page 9, lines 22-34; page 10, line 24 to page 11, line 20), the second communications network having a communications protocol that allows for set up and communications over discrete channels of a reserved bandwidth (Fig. 2, 240; page 7, line 26 to page 8, line 28); and modifying header information associated with said data packets in said stream into a format suitable for communication through said established channel for transfer to said second communications network (page 10, lines 12-22; page 12, line 13 to page 13, line 34; Fig. 3).

The claimed invention, as recited in claim 5, is directed to an apparatus (Fig. 1, 100, 130; Fig. 2, 230) for providing packet-based digital communications between a first communications network and a second communications network (Fig. 1; page 8, line 30 to page 9, line 21), said apparatus comprising: a first transceiver adapted for communicating with the first communications network (Fig. 2, 232), the first communications network having a prioritized communications protocol (Fig. 2, 220; page 7, line 26 to page 8, line 28); a second transceiver adapted for communicating with the second communications network (Fig. 2, 235), the second communications network having a communications protocol that allows for set up and communications over discrete channels of a reserved

bandwidth (Fig. 2, 240; page 7, line 26 to page 8, line 28); a processor (Fig. 2, 237), in communication with said first transceiver, for determining a priority code associated with a data packet received by said first transceiver; said processor (page 9, lines 26-34), further in communication with said second transceiver, for determining whether to open a channel comprising an isochronous channel and for setting up said isochronous channel of reserved bandwidth (page 9, lines 26-34), in response to said priority code; wherein said processor is adapted to perform a first modification process to convert a data packet received from said first transceiver into a format suitable for communication through said second transceiver to said second communications network; and wherein said processor is further configured for performing a second modification process to convert a data packet received from said second transceiver into a format suitable for communication through said first transceiver to said first communications network (page 10, lines 12-22; page 12, line 13 to page 13, line 34; Fig. 3).

The claimed invention, as recited in claim 12, is directed to a method for adapting packet-based digital communications between a first communications network and a second communications network (Fig. 1), said method comprising: detecting in a communication from a first device in the first communications network, a prioritized data packet (Page 9, lines 22-34; page 10, line 24 to page 11, line 20), the first communications network having a prioritized communications protocol (Fig. 1; page 8, line 30 to page 9, line 21; Fig. 2, 220); determining whether said prioritized data packet requires transmission to a second device, in the second communications network, over a channel comprising an isochronous reserved bandwidth channel or an asynchronous channel based on a priority value included in said prioritized data packet (Page 9, lines 22-34; page 10, line 24 to page 11, line 20), the second communications network having a communications protocol that allows for set up and communications over discrete channels of a reserved bandwidth (Fig. 2, 240; page 7, line 26 to page 8, line 28); establishing communications with said second device to open a reserved bandwidth data transmission channel (page 9, lines 31-33); determining that said reserved data transmission channel has been opened; and modifying said prioritized data packet to be suitable for communications over said second

communications network (page 10, lines 12-22; page 12, line 13 to page 13, line 34; Fig. 3).

The claimed invention, as recited in claim 21, is directed to a computer readable storage device (page 16, lines 10-13) storing code, which when executed by a processor, for performing the method of claim 12.

The claimed invention, as recited in claim 22, is directed to an apparatus (Fig. 2, 230)for adapting packet-based digital communications between a first communications network and a second communications network (Figs. 1-2), said apparatus comprising: a first transceiver adapted for communicating with the first network (Fig. 2, 232), the first communications network having a prioritized communications protocol (Fig. 1; page 8, line 30 to page 9, line 21; Fig. 2, 220); a second transceiver adapted for communicating with the second communications network (Fig. 2, 235), the second communications network having a communications protocol that allows for set up and communications over discrete channels of a reserved bandwidth (Fig. 2, 240; page 7, line 26 to page 8, line 28); a processor (Fig. 2, 237) adapted for communicating with said first transceiver and for determining a priority code associated with a data packet received by said first transceiver (page 9, lines 26-34); said processor further adapted for communicating with said second transceiver to determine whether to open a channel comprising an isochronous reserved bandwidth channel or an asynchronous channel in response to the priority code and setting up a channel of reserved bandwidth in response to said priority code (page 9, lines 26-34); wherein said processor is adapted to perform a first modification process to convert a data packet received from said first transceiver into a format suitable for communication through said second transceiver to said second network; and wherein said processor is further adapted for performing a second modification process to convert a data packet received from said second transceiver into a format suitable for communication through said first transceiver to the first communications network (page 10, lines 12-22; page 12, line 13 to page 13, line 34; Fig. 3).

## VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Certain art-based rejections for this application are based on the following references: U.S. Patent 7,352,726 to Fujisawa; U.S. Patent 7,171,121 to Skarica et al. (hereinafter "*Skarica*"); U.S. Patent 6,496,862 to Akatsu et al. (hereinafter "*Akatsu*"); WO 01/074096 to Pathak et al. (hereinafter "*Pathak*"); U.S. Patent 6,657,999 to Brewer; U.S. Patent 7,016,676 to Walke et al. (hereinafter "*Walke*"); U.S. Patent 6,968,374 to Lemieux et al. (hereinafter "*Lemieux*"); U.S. Patent 6,038,233 to Hamamoto et al. (hereinafter "*Hamamoto*"); RFC 0793 (Transmission Control Protocol – September 1981) (hereinafter "*RFC*"); U.S. Patent Appl. Pub. 2002/0016837 to Naudus.

The ground of rejection for this application for which review is sought in this appeal is presented below as follows:

1. Whether claim 21 is properly rejected under 35 U.S.C. §101 as directed to non-statutory subject matter.
2. Whether claims 1-2, 4-7, 12-14, 19, and 21-22 are properly rejected under 35 U.S.C. §103(a) as unpatentable over Fujisawa, Skarica, Akatsu and Pathak.
3. Whether claims 3, 10 and 16 are properly rejected under 35 U.S.C. §103(a) as unpatentable over Fujisawa, Skarica, Akatsu, Pathak and Brewer.
4. Whether claims 8 and 15 are properly rejected under 35 U.S.C. §103(a) as being unpatentable over Fujisawa, Skarica, Akatsu, Pathak and Walke.
5. Whether claims 9 and 20 are properly rejected under 35 U.S.C. §103(a) as unpatentable over Fujisawa, Skarica, Akatsu, Pathak and Lemieux.
6. Whether claim 11 is properly rejected under 35 U.S.C. §103(a) as unpatentable over Fujisawa, Skarica, Akatsu, Pathak and Hamamoto.
7. Whether claim 17 is properly rejected under 35 U.S.C. §103(a) as unpatentable over Fujisawa, Skarica, Akatsu, Pathak and RFC.

8. Whether claim 18 is properly rejected under 35 U.S.C. §103(a) as unpatentable over Fujisawa, Skarica, Akatsu, Pathak and Naudus.

## VII. ARGUMENT

Appellant respectfully traverses the rejection in accordance with the detailed arguments set forth below.

### 1. CLAIM 21 IS IMPROPERLY REJECTED BY THE USPTO UNDER 35 U.S.C. §101 AS BEING DIRECTED TO NON-STATUTORY SUBJECT MATTER.

Claim 21 recites:

> A computer readable storage device storing code, which when executed by a processor, for performing the method of claim 12.

Note that Claim 21 is clearly directed to a 'computer readable storage device' not a 'computer readable storage medium.' In the final Office Action, page 2, the specification was cited as indicating "that the claimed computer readable storage medium can be a signal (Specification p. 16, lines 5-16)." The Examiner is incorrectly interpreting the claim since the claim is directed to a computer readable storage device not a "computer readable storage medium."

The specification on page 16, lines 8-13 recites:

> "Any of the above may be embodied on a computer readable medium, which includes storage devices and signals, in compressed or uncompressed form. Exemplary computer readable storage devices include conventional computer system RAM (random access memory), ROM (read only memory), EPROM (erasable, programmable ROM), EEPROM (electrically erasable, programmable ROM), flash memory, and magnetic or optical disks or tapes." (Emphasis added).

Note that the specification clearly distinguishes that a computer readable medium includes storage devices and signals. The specification then goes further to define the storage devices and signals separately. Appellants' specification clearly does not define computer readable storage devices to include signals.

In the final Office Action, page 23, "Response to Arguments," the Examiner argues that computer readable storage devices can be directed to a signal per se. Appellants

submit that this is incorrect since the specification clearly defines the terms. The computer readable storage device is defined separately from a signal. Furthermore, in Appellants' response of December 23, 2009, Appellants argued on the record that the computer readable storage device was tangible, thus not including a signal.

In Ex parte Daughtrey, Appeal 2008-000202 (BPAI, 7/31/2009) the BPAI declined to adopt a definition of the phrase "computer readable medium" that broadly includes signals, when the Appellant has clearly stated on the record that he did not intend the phrase to include signals (see also MPEP 2111.01 and Director Kappos memo of January 26, 2010).

In the present application both Appellants' specification and the record clearly indicates that the computer readable storage device does not include a signal. Thus, it is respectfully requested that the rejection be reversed.

**2. Claims 1-2, 4-7, 12-14, 19, and 21-22 are not properly rejected under 35 U.S.C. §103(a) as unpatentable over Fujisawa, Skarica, Akatsu and Pathak.**

**A. Claim 1**

Claim 1 is an independent claim that serves directly as a base claim for claims 2-4. Claim 1 calls in part for:

> determining a priority code associated with a data packet of said stream;
>
> establishing a channel in response to said priority code for communicating information in said stream of packet based digital data to a second communications network, the second communications network having a communications protocol that allows for set up and communications over discrete channels of a reserved bandwidth

Starting at the bottom of page 4 and continuing on page 5 of the final Office Action the Examiner admitted that Fujisawa and Skarica do not disclose determining a priority code associated with the data packet and establishing a channel in response to the priority code for communicating information in the stream of packet based digital data to the second communications network. The Examiner points to Akatsu col. 9, lines 40-53.

However, Akatsu simply describes that a test is performed to determine whether the data packet contains real time or non-real time data. Akatsu suggests that by analyzing the data packet header the type of data contained in the data packet can be determined. There is nothing in Akatsu that suggests determining a priority code associated with a data packet and establishing a channel in response to said priority code.

The Examiner appears to take the position that analyzing the data packet header to determine the type of data contained in the data packet is equivalent to appellants' claimed priority code. Appellants' respectfully disagree that there is such an equivalence or even a suggestion of the claimed features.

Appellants' claimed determining a priority code associated with a packet is not the same as analyzing the data packet header to determine the type of data contained in the data packet. For example, Appellants' could assign a different priority code to a packet without any dependence on the type of data contained in the data packet. In contrast, Akatsu is determining the type of data contained in the data packet.

Furthermore, another of Appellants' embodiments describes that the priority code could be used to declare a bit rate of the stream (Appellants' specification page 15, lines 10-19). Since Akatsu is only analyzing the header to determine the type of data in the data packet, Akatsu cannot provide any of the advantages of Appellants' claimed determining a priority code associated with a packet.

In the "Response to Arguments" section of the final Office Action page 24, the Examiner argues that Akatsu discloses that a type of channel is opened based on the results of determining the type of packet by analyzing the header. However, this is not disclosed by Akatsu. Column 9, lines 40-53 discloses that the type of data contained in the data packet can be determined by analyzing the header. This is different from determining the type of packet, as argued by the Examiner. However, both of these arguments by the Examiner are still different from, and not suggestive of, Appellants' features of claim 1.

Thus, one of ordinary skill in the art would not find obvious Appellants' features of claim 1 based on the recited combination of references since the combination does not show or even suggest at least the above mentioned features. As admitted by the Examiner

the combination only suggests an analysis of the header (first full paragraph on page 5 and page 24, final Office Action). There is no suggestion of determining a priority code associated with a data packet of said stream.

Also, on page 5 of the final Office Action, the Examiner further admits that the combination of Fujisawa, Skarica and Akatsu is silent regarding establishing a channel in response to said priority code for communicating information in said stream of packet based digital data to a second communications network.

The Examiner now points to Pathak page 13, lines 1-9, 25-29 and page 14, lines 1-2, 10-19. Appellants' respectfully disagree that Pathak even suggests the elements admitted as lacking in the combination of Fujisawa, Skarica and Akatsu.

Pathak describes on page 13, lines 1-9 that SUC 136 can request NUM 224 to establish a connection. Pathak describes at page 13, line 25 to page 14, line 2 that, when the subscriber station wishes to initiate a connection, it contacts the base station to forward a request to the NUM 224 (also see page 13, lines 1-7). The NUM 224 considers and determines the actual resources and establishes the connection if the resources are available.

There is no description in Pathak of the NUM 224 receiving a stream of packet based digital data from the first communications network, the first communications network having a prioritized communications protocol and determining a priority code associated with a data packet of said stream, as recited in appellant's claim 1. While Pathak appears to establish channels between a subscriber station and a base station, Pathak does not even suggest that the channel is established in response to a priority code as recited in claim 1.

In the "Response to Arguments" section of the final Office Action the Examiner argues that Pathak only discloses setting up a connection based on the type of traffic and the QoS parameters. The Examiner argues that this solves the same problem as Appellant. However, Pathak clearly does not solve the same problem of setting up connections across different networks as described in Appellants' specification. Furthermore, even if it did solve the same problem, the solution in Pathak is different from

Appellants' claimed invention, since Pathak does not even suggest establishing a channel in response to said priority code, the priority code associated with a data packet of said stream.

Thus, Pathak fails to teach or even suggest the features of Appellants' claim 1, which the Examiner admits are lacking in the combination of Fujisawa, Skarica and Akatsu. Therefore, the combination of references fails to teach or even suggest at least the above mentioned features of claim 1.

Furthermore, as discussed below the references are not combinable or even suggestive of appellants' claimed invention since the Examiner is only picking and choosing elements from these references by using appellants' claimed invention as a roadmap. It is clear that the references have only a marginal relationship to the claimed invention. Appellants assert that "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." *KSR*, 127 S.Ct. at 1741; *see also Grain Processing Corp. v. Am. Maize-Prods. Co.*, 840 F.2d 902, 907 (Fed.Cir.1988).

It appears that Fujisawa was cited by the Examiner for the feature of showing both an Ethernet network and an IEEE 1394 network (see FIG. 1). However, Fujisawa simply teaches a communication method for connecting two different networks to form a single network without wasting MAC addresses. Fujisawa is silent with respect to any concern or methodology for providing a connection between prioritized (an Ethernet) and parameterized networks in view of a particular Quality of Service. In particular, Fujisawa fails to disclose or suggest most of the claim elements as recited in claim 1.

Skarica was cited as disclosing that a first communications network has a prioritized communications protocol. However, while Skarica does discuss that its technique relates to a network comprising an Ethernet connection, Skarica simply relates to providing a optical signal to a destination (all via Ethernet) and does NOT at all involve transferring packet based digital data between a prioritized communication network and a network having a communications protocol that allows for set up and communications over discrete channels of a reserved bandwidth (a parameterized communications network). Therefore,

there would be no motivation whatsoever for one skilled in the art to combine Skarica with Fujisawa, and furthermore, such combination would be unworkable as their objectives and systems are wholly unrelated.

Akatsu relates to a method for remote monitoring and control of device nodes in a network system. Akatsu involves formatting and routing data between an external network (which is disclosed as comprising an MPEG network and IP network – *See* Col. 10, lines 8-10) and an internal network (which is disclosed as being an IEEE 1394 bus). Thus, the system of Akatsu is wholly unrelated to and does not teach or suggest communicating between a first network having a prioritized communications protocol and a second network having a communications protocol that allows for set up and communications over discrete channels of a reserved bandwidth (parameterized network). Even if Akatsu could be combined with Fujisawa and/or Skarica, such combination would still fall short of claim 1 as discussed above.

Finally, Pathak involves a system and method for providing local loop telecommunications services through a wireless media, and namely, for providing such services for data and voice. However, Pathak's method is applicable to, and is taught only with respect to, communication between a base station and subscriber stations, and is not related to communication between separate networks, much less communication between a first network having a prioritized communication protocol and a second network which allows reservation of network resources, as in claim 1.

Pathak's method involves connections between a base station and subscriber stations via a wireless network, and bears no relation to communication amongst heterogeneous networks (e.g., between Ethernet based devices and wireless devices). Thus, Pathak's system and method is inapplicable to the presently claimed invention, and cannot and would not be properly combined with the Fujisawa reference.

Thus, while it was shown above that all the elements have not be suggested by the combination of references, it has also been shown that the Examiner is simply picking and choosing elements from among un-combinable references by using appellants' claimed invention as a roadmap.

For at least the reasons set forth above, it is respectfully submitted that claim 1 would not have been obvious to a person of ordinary skill in the art upon a reading of the combination of references. Therefore, it is submitted that claim 1 is allowable under 35 U.S.C. §103. It is respectfully requested that the Board reverse this rejection of claim 1.

**B. Independent Claim 5**

Claim 5 is an independent claim that serves as a base claim for claims 6-11. Claim 5 calls in part for:

> a processor, in communication with said first transceiver, for determining a priority code associated with a data packet received by said first transceiver;
>
> said processor, further in communication with said second transceiver, for determining whether to open a channel comprising an isochronous channel and for setting up said isochronous channel of reserved bandwidth, in response to said priority code

The Examiner rejected claim 5 for similar reasons as used for rejecting claim 1. Appellants' repeat that Akatsu simply describes that a test is performed to determine whether the data packet contains real time or non-real time data. Akatsu suggests that by analyzing the data packet header the type of data contained in the data packet can be determined. There is nothing in Akatsu that suggests determining a priority code associated with a data packet received by the first transceiver, and setting up the isochronous channel of reserved bandwidth, in response to said priority code.

Furthermore, there is no description in Pathak of receiving a stream of packet based digital data from the first communications network, the first communications network having a prioritized communications protocol and setting up said isochronous channel of reserved bandwidth, in response to said priority code, as recited in appellants' claim 5.

For at least the reasons set forth above, it is respectfully submitted that claim 5 would not have been obvious to a person of ordinary skill in the art upon a reading of the

cited combination of references. Therefore, it is submitted that claim 5 is allowable under 35 U.S.C. §103. It is respectfully requested that the Board reverse this rejection of claim 5.

**C. Independent Claim 12**

Claim 12 is an independent claim that serves as a base claim for claims 13-21. Claim 12 calls in part for:

> determining whether said prioritized data packet requires transmission to a second device, in the second communications network, over a channel comprising an isochronous reserved bandwidth channel or an asynchronous channel based on a priority value included in said prioritized data packet, the second communications network having a communications protocol that allows for set up and communications over discrete channels of a reserved bandwidth; (emphasis added).

The Examiner rejected claim 12 for similar reasons as used for rejecting claim 1. Appellants' repeat that Akatsu simply describes that a test is performed to determine whether the data packet contains real time or non-real time data. Akatsu suggests that by analyzing the data packet header the type of data contained in the data packet can be determined. There is nothing in Akatsu that suggests as least the above mentioned features of claim 12. Likewise, Pathak fails to teach the features of claim 12 for which the Examiner points to Pathak as teaching.

For at least the reasons set forth above with regard to claim 1 as applied to the specific features of claim 12, it is respectfully submitted that claim 12 would not have been obvious to a person of ordinary skill in the art upon a reading of the cited combination of references. Therefore, it is submitted that claim 12 is allowable under 35 U.S.C. §103. It is respectfully requested that the Board reverse this rejection of claim 12.

**D. Independent Claim 22**

Independent claim 22 and calls in part for:

> a processor adapted for communicating with said first transceiver and for determining a priority code associated with a data packet received by said first transceiver;
>
> said processor further adapted for communicating with said second transceiver to determine whether to open a channel comprising an isochronous reserved bandwidth channel or an asynchronous channel in response to the priority code and setting up a channel of reserved bandwidth in response to said priority code; (emphasis added).

The Examiner rejected claim 22 for similar reasons as used in rejecting claim 1. Appellants' repeat that Akatsu simply describes that a test is performed to determine whether the data packet contains real time or non-real time data. There is nothing in Akatsu that suggests as least the above mentioned features of claim 22. Likewise, Pathak fails to teach the features of claim 22 for which the Examiner points to Pathak as teaching.

For at least the reasons set forth above and for the reasons from claim 1, as applied to claim 22, it is respectfully submitted that claim 22 would not have been obvious to a person of ordinary skill in the art upon a reading of the cited combination of references. Therefore, it is submitted that claim 22 is allowable under 35 U.S.C. §103. It is respectfully requested that the Board reverse this rejection of claim 22.

**E. Dependent Claims 2, 4, 6, 7, 13-14, 19 and 21**

Claims 2 and 4 depend directly from claim 1. Claims 2 and 4 were rejected for at least the same reasons as claim 1. Claims 6 and 7 depend directly from claim 5 and were rejected for at least the same reasons as claim 5. Claims 19 and 21 depend from claim 12 and were rejected for at least the same reasons as claim 12. Each dependent claim includes all the features of the respective independent claim. Furthermore, each dependent claim includes additional distinguishing features recited therein.

In view of this dependence Appellants essentially repeat the above arguments for each dependent claim. Thus, it is submitted that claims 2, 4, 6, 7, 13-14, 19 and 21 are allowable at least by virtue of their dependency and because each claim recites further

distinguishing features. It is respectfully requested the Board reverse the rejection of dependent claims 2, 4, 6, 7, 13-14, 19 and 21.

**3. Claims 3, 8-10, 11, 15-18 and 20 are not properly rejected under 35 U.S.C. §103(a) as unpatentable over combination of Fujisawa, Skarica, Akatsu, Pathak and additional cited references.**

Claims 3, 8-10, 11, 15-18 and 20 depend from one of independent claims 1, 5, or 12. Each dependent claim includes all the features of their respective base claim including all the particular features discussed immediately above.

None of the additional reference cited beyond the combination of Fujisawa, Skarica, Akatsu, and Pathak was used by the Examiner to show any of the features recited in the respective base claim. Furthermore, none of the additional cited references cures the deficiencies of the combination of Fujisawa, Skarica, Akatsu, and Pathak as discussed above. In view of this dependence, Appellants repeat the above arguments for each of dependent claims 3, 8-10, 11, 15-18 and 20. Thus, it is submitted that claims 3, 8-10, 11, 15-18 and 20 are allowable at least by virtue of their dependency and because each claim recites further distinguishing features. It is respectfully requested the Board reverse the rejection of dependent claims 3, 8-10, 11, 15-18 and 20.

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## Conclusion

In light of these remarks, it is submitted that claims 1-22 would not have been obvious to a person of ordinary skill in the art upon a reading of the combination of reference cited by the Examiner. Therefore, it is believed that claims 1-22 are allowable under 35 U.S.C. §103. It is respectfully requested that the Board of Patent Appeals and Interferences reverse the rejection of claims 1-22.

Respectfully submitted,
Thomas Stahl, et al.

Date: 9/24/10

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## VIII. CLAIMS APPENDIX

1.(previously presented) A method for transferring packet-based digital data between a first communications network and a second communications network, said method comprising:

receiving a stream of packet based digital data from the first communications network, the first communications network having a prioritized communications protocol;

determining a priority code associated with a data packet of said stream;

determining whether to open a channel comprising an isochronous channel or an asynchronous channel in response to the priority code;

using the presence of the priority code as an indication for setting up the channel for communicating information in said stream of packet based digital data to a second communications network, the second communications network having a communications protocol that allows for set up and communications over discrete channels of a reserved bandwidth; and

modifying header information associated with said data packets in said stream into a format suitable for communication through said established channel for transfer to said second communications network.

2.(previously presented) The method of claim 1, wherein said first communications network is an Ethernet network and said second communications network is at least one of an IEEE1394 network and HyperLan 2 network, and wherein the established channel is one of an isochronous reserved bandwidth channel over the IEEE1394 network or an asynchronous channel across the HyperLan2 network based on said priority code.

3.(previously presented) The method of claim 1, wherein modifying header information comprises embedding an IP header associated with said data packet into an OSI layer 3 header in a packet suitable for transmission over said second communications network having a communications protocol that allows for set up and communication over discrete channels of a reserved bandwidth.

4.(previously presented) The method of claim 1, further comprising the step of:

determining whether said prioritized data packet requires transmission to a second device associated with said second communications network over a reserved bandwidth channel based on a priority value included in said prioritized data packet;

establishing a reserved bandwidth data transmission channel for communicating said data stream path to said second device.

5.(previously presented) An apparatus for providing packet-based digital communications between a first communications network and a second communications network, said apparatus comprising:

a first transceiver adapted for communicating with the first communications network, the first communications network having a prioritized communications protocol;

a second transceiver adapted for communicating with the second communications network, the second communications network having a communications protocol that allows for set up and communications over discrete channels of a reserved bandwidth;

a processor, in communication with said first transceiver, for determining a priority code associated with a data packet received by said first transceiver;

said processor, further in communication with said second transceiver, for determining whether to open a channel comprising an isochronous channel and for setting up said isochronous channel of reserved bandwidth, in response to said priority code;

wherein said processor is adapted to perform a first modification process to convert a data packet received from said first transceiver into a format suitable for communication through said second transceiver to said second communications network; and

wherein said processor is further configured for performing a second modification process to convert a data packet received from said second transceiver into a format suitable for communication through said first transceiver to said first communications network.

6.(original) The apparatus of claim 5 wherein said first communications network is an Ethernet network.

7.(original) The apparatus of claim 5 wherein said second communications network is an IEEE 1394 network.

8.(original) The apparatus of claim 5 wherein said second communications network is a HyperLan 2 network.

9.(original) The apparatus of claim 5 wherein said processor establishes the need to set up a reserved bandwidth communications channel through said second transceiver based upon the value of said priority code received by said first transceiver.

10.(original) The apparatus of claim 5 wherein said first modification process embeds an IP header associated with said data packet received from said first transceiver into an OSI layer 3 header in a packet suitable for transmission over said second communications network

11.(original) The apparatus of claim 5 wherein said second modification process strips from a data packet received from said second communication network a data header associated with said second communication network; and wherein said second modification process further converts said data packet into a format suitable for transmission to said first communications network.

12.(previously presented) A method for adapting packet-based digital communications between a first communications network and a second communications network, said method comprising:

detecting in a communication from a first device in the first communications network, a prioritized data packet, the first communications network having a prioritized communications protocol;

determining whether said prioritized data packet requires transmission to a second device, in the second communications network, over a channel comprising an isochronous reserved bandwidth channel or an asynchronous channel based on a priority value included in said prioritized data packet, the second communications network having a communications protocol that allows for set up and communications over discrete channels of a reserved bandwidth;

establishing communications with said second device to open a reserved bandwidth data transmission channel;

determining that said reserved data transmission channel has been opened; and

modifying said prioritized data packet to be suitable for communications over said second communications network.

13.(original) The method of claim 12 wherein said first communications network is an Ethernet network.

14.(original) The method of claim 12 wherein said second communications network is an IEEE 1394 network.

15.(original) The method of claim 12 wherein said second communications network is a HyperLan 2 network.

16.(original) The method of claim 12 wherein said modifying of said prioritized data packet embeds an IP header associated with said data packet received from said communication from a first device into an OSI layer 3 header in a packet suitable for transmission to said second device over said second communications network.

17.(original) The method of claim 12, further comprising determining when there is no more data to be received from said first device and establishing communications with said second device to close said reserved data transmission channel.

18.(original) The method of claim 12 further comprising establishing communications with said second device to close said reserved data transmission channel after a predetermined period of time within which no further communication is received from said first device.

19.(original) The method of claim 12 wherein said communications with said second communications network is monitored for bandwidth usage and communications is established over said network when necessary to modify the amount of said reserved bandwidth based on said bandwidth usage.

20.(original) The method of claim 12 wherein said communications with said second device to open a reserved bandwidth data transmission channel further comprises evaluating a portion of a data header contained in said prioritized data packet and requesting a bandwidth size based on the results of said evaluation.

21.(previously presented) A computer readable storage device storing code, which when executed by a processor, for performing the method of claim 12.

22.( previously presented) An apparatus for adapting packet-based digital communications between a first communications network and a second communications network, said apparatus comprising:

a first transceiver adapted for communicating with the first network, the first communications network having a prioritized communications protocol;

a second transceiver adapted for communicating with the second communications network, the second communications network having a communications protocol that allows for set up and communications over discrete channels of a reserved bandwidth;

a processor adapted for communicating with said first transceiver and for determining a priority code associated with a data packet received by said first transceiver;

said processor further adapted for communicating with said second transceiver to determine whether to open a channel comprising an isochronous reserved bandwidth

channel or an asynchronous channel in response to the priority code and setting up a channel of reserved bandwidth in response to said priority code;

wherein said processor is adapted to perform a first modification process to convert a data packet received from said first transceiver into a format suitable for communication through said second transceiver to said second network; and

wherein said processor is further adapted for performing a second modification process to convert a data packet received from said second transceiver into a format suitable for communication through said first transceiver to the first communications network.

## IX. EVIDENCE APPENDIX

No evidence has been submitted pursuant to §§ **1.130**, **1.131**, or **1.132** of this title. No other evidence has been entered by the Examiner and/or relied upon by Appellant in this appeal, at this time.

## X. RELATED PROCEEDINGS APPENDIX

Appellant is not aware of any appeals or interferences related to the present application.